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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SMITH, TYRONE W

ART UNIT PAPER NUMBER

2837

DATE MAILED: 10/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/997,892

Applicant(s)

KELLER, ROBERT R.

Examiner

Tyrone W Smith

Art Unit

2837

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 25-42 is/are rejected.
- 7) ☒ Claim(s) 23 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Regarding claims 28 and 32, the phrase "about" and "a more than fully loaded" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. Correct is required and appropriate.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 22 and 25 – 42 rejected under 35 U.S.C. 103(a) as being unpatentable over Miura (5994858) in view of Fitzgibbon et al (6172475).

Regarding Claims 1, 11, 12, 30, 32, 37, 38, and 40. Miura discloses a method and apparatus for detecting obstruction to powered window movement, which includes initiating a learning mode (switching device – Figure 1 item 1), operating a motor (control operation unit and motor drive unit – Figure 1 item(s) 9 and 3), measuring at least one parameter that corresponds to the operation of the motor to provide a parameter value (pulse generator –

Figure 1 item 5), using the parameter value to establish a specific force control value to establish obstacle detection or reversing operation or stoppage or other types of operation. Further, assigning specific force control value to a specific location of the set memory unit (refer to Figure 1 item(s) 5, 9 and 10; column 18 lines 37 – 67 and column 19 lines 1 – 4). However, Miura does not disclose using a user manipulability setting range for the force control.

Fitzgibbon discloses a movable barrier operator, which includes an up and down force potentiometers (Figure 4 item(s) 202 and 204) for setting the command force for up and down travels. Further, the potentiometers are used for providing inputs to the controller (Figure 4 item 200), which is used to adjust the length of the pulsed signal provided to the FET (Figure 4 item 252). Also, refer to column 5 lines 1 – 18 and column 13 lines 1 – 21.

Regarding Claims 2, 20 – 22, 33. Miura measures at least one parameter that corresponds to the operation of the motor to provide a parameter value, uses the parameter value to establish a specific force control value to establish obstacle detection or reversing operation or stoppage or other types of operation and assigns a specific force control value to a specific location of the set memory unit (column 18 lines 37 – 67 and column 19 lines 1 – 4). Fitzgibbon uses up and down force potentiometers for setting the command force for up and down travels (column 5 lines 1 – 18 and column 13 lines 1 – 21.)

Regarding Claims 3 – 6, 25 – 29 and 34 – 36. Fitzgibbon uses up and down force potentiometers for setting the command force for up and down travels, a maximum force control value set by the potentiometers for force control includes using a sensed parameter to calculate the maximum force control value. Further, using previously stored control values to identify maximum force control value (Figure(s) 4 and 6A – 20A; column 5 lines 1 – 18 and column 13 lines 1 – 61).

Regarding Claims 7 – 8 and 31. Miura describes disabling and enabling at least some barrier controller function unit the learning mode has been initiated or concluded (Miura (column 7 lines 36 – 42 and column 9 lines 11 – 58).

Regarding Claims 9 – 10 and 39. Miura and Fitzgibbon describe a user manipulability learning mode switch (Miura – Figure 1 item 1 and Fitzgibbon – Figure 4 item 250).

Regarding Claims 13 – 16 and 18 – 19. Miura measures at least one parameter (speed) that corresponds to the operation of the motor, using a pulse generator, to provide a parameter value (Figure 4; column 7 lines 22 – 35 and column 18 lines 37 – 67).

Regarding Claim 17. Fitzgibbon discloses a visual signal (Figure 4 item 210) to indicate initiation of the learning mode (column 7 lines 1 – 21).

Regarding Claims 41 – 42. Miura discloses a pulse edge counter (Figure 1 item 12) to determine other force control values and assign the values to specific locations of the memory unit (column 7 lines 48 – 67 and column 8 lines 1 – 14).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Miura invention of detecting obstruction to powered window movement with Fitzgibbon's invention of a movable barrier operator where in the place of the memory unit used in Miura force potentiometers is used in Fitzgibbon for assigning specific force control value to a specific location of the user manipulability setting range of the force control. The advantage of combining the two would provide a system would provide a system for accurately detecting obstructions in a movable barrier in operation through the use of a parameter and force potentiometers.

Claim Objections-Allowable Subject Matter

5. Claims 23 and 24 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:
The prior art(s) of record does not disclose assigning the force control values to thereby establish a linear or non-linear relationship between the assigned force control values with respect to the other settings of the user manipulability setting range.

Response to Amendment/Arguments

6. Applicant's arguments filed August 23, 2003 have been fully considered but they are not persuasive.

Applicant argues that neither Miura [858] nor Fitzgibbon [475] does not teach the claimed subject matter, obstacle detection system during learning mode, but rather a system that automatically establish a force control value to be utilized during subsequent operations. Further, Miura [858] nor Fitzgibbon [475] does not suggest or disclose the desirability of not only automatically determining or otherwise providing a force control value to use during subsequent operations. Examiner notes Applicant's concerns and issues.

Examiner's rejection is based on the claims as presented which Miura [858] and Fitzgibbon [475] teach and show under 35 U.S.C. 103(a). Referring to Claim 1, 30, 37, 38 and 40, Miura initiates a learning mode, operating a motor, measuring at least one parameter that corresponds to the operation of the motor to provide a parameter value and using the parameter value to establish a specific force control value to establish obstacle detection or reversing

operation or stoppage or other types of operation, this is clear based on the claims as presented. The Miura reference does not have a user manipulability setting range for the force control. Fitzgibbon uses up and down force potentiometers for setting the command force for up and down travels, a maximum force control value set by the potentiometers for force control includes using a sensed parameter to calculate the maximum force control value. Further, using previously stored control values to identify maximum force control value that can be to a specific location of the user manipulability setting range, this read on the claims as presented to the Examiner.

The Applicant also states that the teachings cannot be properly applied in hindsight to purportedly render the same teachings as being obvious. Examiner notes Applicant's concerns and issues.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Examiner suggests that the Applicant amend the claims to (1) overcome Miura [858] and Fitzgibbon [475] (2) and contact the Examiner to clear any issues that the Applicant might have regarding the use of art, remember the rejection is based on the claims as presented and claims 23 and 24 were objected to based on being dependent on an independent claim.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tyrone W Smith whose telephone number is 703-306-5987. The examiner can normally be reached on weekdays from 8:30am to 5:00pm

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi, can be reached on (703) 308-3370 fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

Tyrone Smith
Patent Examiner

Art Unit 2837


ROBERT NAPPI
SUPERVISORY PATENT EXAMINER